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09/784,074	02/16/2001	Ronald Keith Dobes	200876US8	4897
22850	7590 04/18/2005		EXAM	IINER
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.		ZHONG	, CHAD	
	RIA, VA 22314		ART UNIT	PAPER NUMBER
			2152	
			DATE MAILED: 04/18/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
Office Action Summary		09/784,074	DOBES ET AL.	
		Examiner	Art Unit	
		Chad Zhong	2152	
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)⊠	Responsive to communication(s) filed on 09 D	ecember 2004.		
2a)⊠	This action is FINAL . 2b) ☐ This	action is non-final.		
3)	Since this application is in condition for allowa			
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.	
Disposit	ion of Claims			
4) ⊠ Claim(s) 1-36,39-58,60-102 and 104-117 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-36,39-58,60-102 and 104-117 is/are rejected. 7) □ Claim(s) is/are objected to.				
,—	8) Claim(s) are subject to restriction and/or election requirement. Application Papers			
	The specification is objected to by the Examine	ar .		
,	The drawing(s) filed on is/are: a) acc		Examiner.	
. •,	Applicant may not request that any objection to the			
44)	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).	
11)[_]	The oath or declaration is objected to by the Ex	xammer. Note the attached Office	Action of form PTO-132.	
Priority (under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachmer	nt(s)			
	ce of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail D		
3) Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 er No(s)/Mail Date		Patent Application (PTO-152)	

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FINAL ACTION

1. This action is responsive to communications: Amendment, filed on 12/09/2004. This action has been made final.

Claims 1-36, 39-58, 60-102, 104-117 are presented for examination. In amendment B, filed on 12/09/2004. During the Interview 10/05/04, the Examiner agrees to withdraw finality based on a misunderstanding in interview on 8/4/04 to give the applicant a second opportunity to respond to the office action.

Claims 1, 39-41, 53-55, 57, 58, 66-77, 83, 104, 106, 113, 115, 117 have been amended.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1, 10, 15-20, 22, 39, 45-47, 53, 60-63, 65, 78, 83, 90-95 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1, 10, 17, 3, 4, 6 of copending Application No. 09-784068 in view of Gilbert, US 2002/0069163. This is a provisional obviousness-type double patenting rejection.

09-784074	Co-pending application: 09-784068
1 A network operations support system operated by a third party for supporting multiple service providers, each having end-users connected to a	1 A method for expanding customer bases for data services providers, comprising the steps of:

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common network operated by the third party, multiple service providers each being a customer of the third party, comprising:

a digital repository populated with entries including information about end-users of a first service provider of the multiple service providers and other information about end-users of a second service provider of the multiple service providers; and

entries including billing information corresponding to usage of the common network by end-users of at least one of multiple service providers;

a processor; and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement,

a common interface mechanism configured to provide a single user interface for the first service provider and the second service provider to access entries in the digital repository, the first service provider having access to entries regarding the endusers of the first service provider and the second service provider having access to entries regarding the end-users of the second service provider

a common provisioning mechanism configured to provision end-users to the common network and to confirm that a selected service provider of the first service provider and the second service provider is a customer of the third party prior to provisioning an end-user of the selected service provider to the common network, and

a customer billing mechanism configured to maintain billing information in the digital repository for the third party and to generate a bill for each of the multiple service providers having at least one end-user connected to the third party's common network based on usage of the common network by the service provider's respective end-users.

connecting a first end-user of a first data services provider to a high-speed network operated by a third party and dedicated to broadband data transport services using a common provisioning system of the third party, the high-speed network being at least one of a hybrid fiber optic coaxial network and an all-fiber optic network;

connecting a second end-user of a second data services provider to the high-speed network using the common provisioning system;

connecting the first end-user to a headend of the first data services provider through a common data center of the high-speed network; and

connecting the second end-user to a headend of the second data services provider through the common data center of the high-speed network

generating a first bill for the first data services provider by the common data center based on the first end-user's usage of the high speed network; and

generating a second bill for the first data services provider by the common data center based on the second end-user's usage of the high speed network;

wherein the third party, is not the first data services provider and not the second data services provider, and

the first data services provider and the second data services provider each being a customer of the third party.

Gilbert teaches the common interface and provisioning mechanism in order to allow users easy access to the repository information

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09-784074	Co-pending application: 09-784068
10. The system of claim 1, wherein the digital repository comprises a database.	12. A method for reusing computer resources to provide operations support services to a plurality of Internet service providers with different customer bases, comprising the steps of: populating a digital repository with entries including information about end-users of a first Internet service provider; populating the digital repository with entries including information about end-users of a second Internet service provider, the second Internet service provider being different from the first Internet service provider; presenting a graphical user interface to the first Internet service provider when seeking to at least one of access, create, and update the information about end-users of the first Internet service provider; and presenting the graphical user interface to the second Internet service provider when seeking to at least one of access, create, and update the information about end-users of the second Internet service provider.

Claim 10 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784068
15. The system of claim 1, wherein the common network comprises a network dedicated to broadband data transport services.	1. A method for expanding customer bases for data services providers, comprising the steps of: connecting a first end-user of a first data services provider to a high-speed network dedicated to broadband data transport service

Claim 15 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784068
16. The system of claim 15, wherein the broadband data transport services comprise at least one of Internet access, packetized voice, voice over IP, and video on demand.	See claim 12 above

Claim 16 is rejected under non-obvious double patenting, Internet service providers provide Internet access services

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09-784074	Co-pending application: 09-784068
17. The system of claim 1, wherein the common	See claim 12 above
network comprises an open access network.	

Claim 17 is rejected under non-obvious double patenting, Internet service providers provide Internet access services, Internet is an type of open access network.

09-784074	Co-pending application: 09-784068
18. The system of claim 1, wherein at least a portion of the common network comprises an Internet protocol network.	See claim 12 above

Claim 18 is rejected under non-obvious double patenting, Internet service providers provide Internet access services.

09-784074	Co-pending application: 09-784068
19. The system of claim 1, wherein at least a portion of the common network comprises a hybrid fiber optic coaxial network.	1the high-speed network being at least one of a hybrid fiber optic coaxial network and an all-fiber optic network;

Claim 19 is rejected under non-obvious double patenting.

09-784074	Co-pending application: 09-784068
20. The system of claim 1, wherein the at least one of the multiple service providers comprises an Internet service provider.	See claim 12 above

Claim 20 is rejected under non-obvious double patenting, Internet service providers provide Internet access services.

As per claim 39, claim 39 is rejected for the same reasons as rejection to claim 1 above.

09-784074	Co-pending application: 09-784068
45. The system of claim 1, wherein at least a portion of the common network comprises a Data Over Cable Service Interface Specification network.	3. The method of claim 1, wherein the headend of the first data services provider is a headend for at least one of CATV signals and data.

Claim 45 is rejected under non-obvious double patenting

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09-784074	Co-pending application: 09-784068
46. The system of claim 1, wherein at least a portion of the common network comprises a European Data Over Cable Service Interface Specification.	4. The method of claim 2, wherein: the communications plant operated by the first data services provider carry CATV signals; and the peripheral reach of the communications plant is restricted by a governmental regulatory authority.

It would have been obvious to allow European government to regulate Data Over Cable Service Interface Specification.

09-784074	Co-pending application: 09-784068
47. The system of claim 1, wherein the digital repository is implemented as a single instance of a database.	6. The method of claim 1, further comprising the steps of: storing a first end-user entry in a database of the common data center corresponding to the first end-user

Claim 47 is rejected under non-obvious double patenting

As per claim 53, claim 53 is rejected for the same reasons as rejection to claim 1 above.

09-784074	Co-pending application: 09-784068
57. The computer program product of claim 53, further comprising: a fourth computer code device configured to maintain at least one of network usage information and end-user provisioning information in the database, wherein the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the fourth computer code device to maintain entries of the database regarding the at least one of network usage information and end-user provisioning information.	7. A method for supplementing subscribership for data services of a service provider that provides at least one of CATV services and data services in first geographic area, comprising the steps of: obtaining a contract from the service provider to provide data services for an end-user, the end-user located outside of the first geographic area; provisioning the end-user for data services; storing an end-user entry in a database corresponding to the end-user; associating the end-user entry with the service provider in the database; and connecting the end-user to a communication line operated by the service provider via a high speed data network.

Claim 57 is rejected under non-obvious double patenting

As per claims 60-63, 65, claims 60-63, 65 are rejected for the same reasons as rejection to claims 15-18 and 20 above respectively.

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As per claim 78, claim 78 is rejected for the same reasons as rejection to claim 45 above.

As per claim 83, claim 83 is rejected for the same reasons as rejection to claim 1 above.

As per claims 90-93, 95, claims 90-93, 95 are rejected for the same reasons as rejection to claim 15-18, 45 above.

Claim 1, 6, 10, 15-20, 22, 39, 45-47, 53, 60-65, 78, 83, 90-95, 97 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1, 10, 17, 3, 4, 6 of copending Application No. 09-784075 in view of Gilbert, US 2002/0069163. This is a provisional obviousness-type double patenting rejection.

09-784074

- 1 A network operations support system operated by a third party for supporting multiple service providers, each having end-users connected to a common network operated by the third party, multiple service providers each being a customer of the third party, comprising:
- a digital repository populated with entries including information about end-users of a first service provider of the multiple service providers and other information about end-users of a second service provider of the multiple service providers; and

entries including billing information corresponding to usage of the common network by end-users of at least one of multiple service providers;

- a processor; and
- a computer readable medium encoded with processor readable instructions that when executed by the processor implement,

Co-pending application: 09-784075

- 1. a system for self-authenticating a first end-user connected to a common network of a third party and a second end-user connected to the common network, the first end-user being a customer of a first service provider of multiple service providers and the second end-user being a customer of a second service provider of multiple service providers comprising:
- a digital repository populated with provider entries including information about the first service provider and other information about the second service provider

end-user entries including information about the first end-user and other information about the second end-user, each of the end-user entries being associated with at least one service provider entry and

service description entries including information

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a common interface mechanism configured to provide a single user interface for the first service provider and the second service provider to access entries in the digital repository, the first service provider having access to entries regarding the endusers of the first service provider and the second service provider having access to entries regarding the end-users of the second service provider

a common provisioning mechanism configured to provision end-users to the common network and to confirm that a selected service provider of the first service provider and the second service provider is a customer of the third party prior to provisioning an end-user of the selected service provider to the common network, and

a customer billing mechanism configured to maintain billing information in the digital repository for the third party and to generate a bill for each of the multiple service providers having at least one end-user connected to the third party's common network based on usage of the common network by the service provider's respective end-users.

about a level of service purchased by an end-user from a service provider, each of the service description entries being associated with an enduser entry

a processor and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement

a new device detection mechanism configured to detect a new device connected to the common network, the new device being associated with one of the first end-user and the second end-user

a bandwidth allocation mechanism configured to allocate limited bandwidth on the common network to the new device and to provide access to an enduser authentication mechanism

the end-user authentication mechanism configured to obtain identification information from the one of the first end-user and the second end-user

a service determination mechanism configured to query the digital repository to determine the level of service purchased by the one of the first end-user and the second end-user from a respective one of the multiple service providers based on information obtained by the end-user authentication mechanism

a service allocation mechanism configured to provide the level of service purchased to the on e of the first end-user and the second end-user authenticated by the end-user authentication mechanism

a customer billing mechanism configured to establish and maintain billing information in the digital repository for the third party by establishing a relationship between the one of the first end user and the second end user and the respective one of the multiple service providers and to generate a bill for respective one of the multiple service providers based on usage of the common network by the one of the first end user and the second end user

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Gilbert teaches the common interface and provisioning mechanism in order to allow users easy access to the repository information

09-784074	Co-pending application: 09-784075
6. The system of claim 1, wherein the common interface mechanism is further configured to provide secure access to entries in the digital repository.	See claim 1 above

Claim 6 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784075
10. The system of claim 1, wherein the digital repository comprises a database.	2. The system of claim 1, wherein the digital repository comprises a database.

Claim 10 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784075
15. The system of claim 1, wherein the common network comprises a network dedicated to broadband data transport services.	3. The system of claim 1, wherein the common network comprises a network dedicated to broadband data transport services.

Claim 15 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784075
16. The system of claim 15, wherein the broadband data transport services comprise at least one of Internet access, packetized voice, voice over IP, and video on demand.	4. The system of claim 3, wherein the data transport services comprise at least one of Internet access, voice over IP, and video on demand.

Claim 16 is rejected under non-obvious double patenting, Internet service providers provide Internet access services

09-784074	Co-pending application: 09-784075
17. The system of claim 1, wherein the common network comprises an open access network.	5. The system of claim 1, wherein the common network comprises an open access network.

Claim 17 is rejected under non-obvious double patenting.

09-784074	Co-pending application: 09-784075
18. The system of claim 1, wherein at least a	6. The system of claim 1, wherein at least a portion

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portion of the common network comprises an	of the common network comprises an Internet
Internet protocol network.	protocol network.

Claim 18 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784075
19. The system of claim 1, wherein at least a portion of the common network comprises a hybrid fiber optic coaxial network.	7. The system of claim 1, wherein at least a portion of the common network comprises a hybrid fiber optic coaxial network.

Claim 19 is rejected under non-obvious double patenting.

09-784074	Co-pending application: 09-784075
20. The system of claim 1, wherein the at least one of the multiple service providers comprises an Internet service provider.	8. The system of claim 1, wherein at least one of the multiple service providers comprises an Internet service provider.

Claim 20 is rejected under non-obvious double patenting

As per claim 39, claim 39 is rejected for the same reasons as rejection to claim 1 above.

09-784074	Co-pending application: 09-784075
45. The system of claim 1, wherein at least a portion of the common network comprises a Data Over Cable Service Interface Specification network.	9. The system of claim 1, wherein at least a portion of the common network comprises a Data Over Cable Service Interface Specification network.

Claim 45 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784075
46. The system of claim 1, wherein at least a portion of the common network comprises a European Data Over Cable Service Interface Specification.	10. The system of claim 1, wherein at least a portion of the common network comprises a European Data Over Cable Service Interface Specification network.

Claim 46 is rejected under non-obvious double patenting

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09-784074	Co-pending application: 09-784075
47. The system of claim 1, wherein the digital repository is implemented as a single instance of a database.	2. The system of claim 1, wherein the digital repository comprises a database.

Claim 47 is rejected under non-obvious double patenting

As per claim 53, claim 53 is rejected for the same reasons as rejection to claim 1 above.

As per claims 60-65, claims 60-65 are rejected for the same reasons as rejection to claims 15-20 above respectively.

As per claim 78, claim 78 is rejected for the same reasons as rejection to claim 45 above.

As per claim 83, claim 83 is rejected for the same reasons as rejection to claim 1 above.

As per claims 90-96, claims 90-96 are rejected for the same reasons as rejection to claim 15-18, 45-46 above.

As per claim 97, claim 97 is rejected for the same reasons as rejection to claim 20 above.

Claim 1, 6, 10, 8, 15-20, 29-32, 45-47, 53, 60-65, 78, 83, 90-97 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-12 of copending Application No. 09-784069 in view of Gilbert, US 2002/0069163. This is a provisional obviousness-type double patenting rejection.

09-784074	Co-pending application: 09-784069
1 A network operations support system operated by a third party for supporting multiple service providers, each having end-users connected to a common network operated by the third party, multiple service providers each being a customer of	1. A trouble ticketing system of a third party for supporting multiple service providers, each having end-users connected to a common network of the third party, comprising:
the third party, comprising:	a digital repository populated with

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a digital repository populated with entries including information about end-users of a first service provider of the multiple service providers and other information about end-users of a second service provider of the multiple service providers; and

entries including billing information corresponding to usage of the common network by end-users of at least one of multiple service providers;

a processor; and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement,

a common interface mechanism configured to provide a single user interface for the first service provider and the second service provider to access entries in the digital repository, the first service provider having access to entries regarding the endusers of the first service provider and the second service provider having access to entries regarding the end-users of the second service provider

a common provisioning mechanism configured to provision end-users to the common network and to confirm that a selected service provider of the first service provider and the second service provider is a customer of the third party prior to provisioning an end-user of the selected service provider to the common network, and

a customer billing mechanism configured to maintain billing information in the digital repository for the third party and to generate a bill for each of the multiple service providers having at least one end-user connected to the third party's common network based on usage of the common network by the service provider's respective end-users.

service provider entries including information about a first service provider of the multiple service providers and other information about a second service provider of the multiple service providers, end-user entries including information about end-users of the first service provider and other information about end-users of the second service provider, each of the end-user entries being associated with at least one of the service provider entries, and

trouble ticket entries including trouble ticket information including trouble ticket status information, each of the trouble ticket entries being associated with at least one of an end-user entry and a service provider entry and corresponding to usage of the common network;

a processor; and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement,

a common provisioning mechanism configured to provision end-users to the common network and to confirm that a selected service provider of the first service provider and the second service provider is a customer of the third party prior to provisioning an end-user of the selected service provider to the common network

a common trouble ticket interface mechanism configured to provide a single user interface for the first service provider and the second service provider to access entries in the digital repository, the first service provider having access to trouble ticket entries associated with the first service provider and end-user entries associated with the first service provider and the second service provider having access to trouble ticket entries associated with the second service provider and end-user entries associated with the second service provider, and

a trouble ticket tracking mechanism configured to access and maintain trouble ticket entries in the digital repository.

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Gilbert teaches the billing mechanism in order to allow billing be done on behalf of service providers

09-784074	Co-pending application: 09-784069
6. The system of claim 1, wherein the common interface mechanism is further configured to provide secure access to entries in the digital repository.	2. The system of claim 1, wherein the common trouble ticket interface mechanism is further configured to provide secure access to the entries in the digital repository.

Claim 6 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
8. The system of claim 1, wherein the common interface mechanism comprises a single web portal.	3. The system of claim 1, wherein the common trouble ticket interface mechanism comprises a web portal.

Claim 8 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
10. The system of claim 1, wherein the digital repository comprises a database.	4. The system of claim 1, wherein the digital repository comprises a database.

Claim 10 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
15. The system of claim 1, wherein the common network comprises a network dedicated to broadband data transport services.	5. The system of claim 1, wherein the common network comprises a network dedicated to broadband data transport services.

Claim 15 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
16. The system of claim 15, wherein the broadband data transport services comprise at least one of Internet access, packetized voice, voice over IP, and video on demand.	6. The system of claim 5, wherein the data transport services comprise at least one of Internet access, voice over IP, and video on demand.

Claim 16 is rejected under non-obvious double patenting, Internet service providers provide Internet access services

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09-784074	Co-pending application: 09-784069
17. The system of claim 1, wherein the common	7. The system of claim 1, wherein the common
network comprises an open access network.	network comprises an open access network.

Claim 17 is rejected under non-obvious double patenting.

09-784074	Co-pending application: 09-784069
18. The system of claim 1, wherein at least a portion of the common network comprises an Internet protocol network.	8. The system of claim 1, wherein at least a portion of the common network comprises an Internet protocol network.

Claim 18 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
19. The system of claim 1, wherein at least a portion of the common network comprises a hybrid fiber optic coaxial network.	9. The system of claim 1, wherein at least a portion of the common network is a hybrid fiber optic coaxial network.

Claim 19 is rejected under non-obvious double patenting.

09-784074	Co-pending application: 09-784069
20. The system of claim 1, wherein the at least one of the multiple service providers comprises an Internet service provider.	10. The system of claim 1, wherein the at least one of the multiple service providers comprises an Internet service provider.

Claim 20 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
29. The system of claim 1, wherein: the digital repository is further populated with entries including trouble ticket status information; and the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a trouble ticketing mechanism configured to access and maintain entries in the digital repository regarding trouble ticket information.	See claim 1 above

Claim 29 is rejected under non-obvious double patenting

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09-784074	Co-pending application: 09-784069
30. The system of claim 29, wherein the common interface mechanism is further configured to provide access to the trouble ticketing mechanism for at least one of the multiple service providers and network management personnel.	See claim 1 above

Claim 30 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
31. The system of claim 29, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an internal personnel access mechanism configured to provide internal personnel with direct access to the trouble ticketing mechanism.	See claim 1 above

Claim 31 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
32. The system of claim 29, wherein the trouble ticket status information includes at least one of a trouble ticket status indicator, a problem indicator, an impacted end-user indicator, and a service provider indicator.	See claim 1 above

Claim 31 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
45. The system of claim 1, wherein at least a portion of the common network comprises a Data Over Cable Service Interface Specification network.	11. The system of claim 1, wherein at least a portion of the common network comprises a Data Over Cable Service Interface Specification network.

Claim 45 is rejected under non-obvious double patenting

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09-784074	Co-pending application: 09-784069
46. The system of claim 1, wherein at least a portion of the common network comprises a European Data Over Cable Service Interface Specification.	12. The system of claim 1, wherein at least a portion of the common network comprises a European Data Over Cable Service Interface Specification network.

Claim 46 is rejected under non-obvious double patenting

09-784074	Co-pending application: 09-784069
47. The system of claim 1, wherein the digital repository is implemented as a single instance of a database.	4. The system of claim 1, wherein the digital repository comprises a database.

Claim 47 is rejected under non-obvious double patenting

As per claim 53, claim 53 is rejected for the same reasons as rejection to claim 1 above.

As per claims 60-65, claims 60-65 are rejected for the same reasons as rejection to claims 15-20 above respectively.

As per claim 78, claim 78 is rejected for the same reasons as rejection to claim 45 above.

As per claim 83, claim 83 is rejected for the same reasons as rejection to claim 1 above.

As per claims 90-96, claims 90-96 are rejected for the same reasons as rejection to claim 15-18, 45-46 above.

As per claim 97, claim 97 is rejected for the same reasons as rejection to claim 20 above.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claim 53 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Computer program per se, the claimed invention is not stating that the 'computer storage medium' is a disk, for example. Note, the specification discloses 'carrier wave' or signal transmission as storage medium.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 (c) of this title before the invention thereof by the applicant for patent.
- 3. Claim 1 are rejected under 35 U.S.C. 102(e) as being anticipated by Gilbert, US 2002/0069163.
- 4. As per claim 1, Gilbert teaches a network operations support system for supporting multiple service providers, each having end-users connected to a common network operated by the third party (item 300, Fig 6), the multiple service providers each being a customer of the third party (Fig 6, [0073]), comprising:
 - a digital repository populated with

entries including information about end-users of a first service provider of the multiple service providers and other information about end-users of a second service provider of the multiple service providers ([0064-0066]; [0073]);

a processor ([0056]); and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement ([0056]),

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a common interface mechanism configured to provide a single user interface for the first service provider and the second service provider to access entries in the digital repository, the first service provider having access to entries regarding the end-users of the first service provider and the second service provider having access to entries regarding the end-users of the second service provider ([0070-0071]; [0073]).

a common provisioning mechanism configured to provision end users to the common network and to confirm that a selected service provider of the first service provider and the second service provider is a customer of the third party prior to provisioning an end user of the selected service provider to the common network ([0071], [0073]), and

entries including billing information corresponding to usage of the common network by end users of at least one of the multiple service providers ([0011]; [0014-0015])

a customer billing mechanism configured to maintain billing information in the digital repository for the third party and to generate a bill for each of the multiple service providers having at least one end user connected to the third party's common network based on usage of the common network by the service provider's respective end-users ([0011]; [0014-0015]).

5. As per claim 2, Gilbert teaches the system of claim 1, wherein:
the digital repository is further populated with entries including network management information
([0050]); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement ([0056]);

a network management mechanism configured to access and maintain entries in the digital repository regarding network management information (Col. 7, lines 5-20).

6. As per claim 3, Gilbert teaches the system of claim 2, wherein the network management

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information includes network status monitoring information ([0073]).

7. As per claim 4, Gilbert teaches the system of claim 1, wherein:

entries including end-user provisioning information ([0063]; [0073]); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an end-user management mechanism configured to access and maintain entries in the digital repository regarding at least one of network usage information and end-user provisioning information ([0073]).

the digital repository is further populated with entries including network usage information ([0011]; [0014-0015]).

8. As per claim 5, Gilbert teaches the system of claim 4, wherein:

the end-user provisioning information includes at least one of end-user equipment information, level of service information, and end-user service provider information ([0051]; [0073]).

the network usage information includes at least one of end-user connectivity duration and end-user connectivity time-of-day information ([0011]; [0014-0015]; [0051]; [0073], wherein the rate plans are inherently based on amount of services used over a <u>period of time</u> i.e. hourly, weekly, monthly, yearly etc.; furthermore, utilities companies i.e. electric/water/gas, collect fees based on amount of services used over a period of time, there are meters to keeping track of amount of information used during a particular time frame, the connectivity duration would be exemplified in the period usage time in order to generate an accurate bill for the end user)

9. As per claim 6, Gilbert teaches the system of claim 1, wherein the common interface mechanism is further configured to provide secure access to entries in the digital repository ([0055];

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[0067]).

- 10. As per claim 8, Gilbert teaches the system of claim 1, wherein the common interface mechanism comprises a single web portal (website contains plural functions is a web portal, item 300 on Fig 6 provides plurality of functions such as billing and payment for a plurality of service providers and end users, see for example, [0073]).
- 11. As per claim 9, Gilbert teaches the system of claim 8, wherein the common interface mechanism further comprises automated interfaces implemented as at least one of an extensible markup language interface, a file transfer protocol interface, an rsync Internet protocol interface, and an electronic mail interface ([0070]; [0067]).
- 12. As per claim 10, Gilbert teaches the system of claim 1, wherein the digital repository comprises a database (item 300, Fig 6).
- 13. As per claim 11, Gilbert teaches the system of claim 2, wherein the common interface mechanism is further configured to provide access to the network management mechanism for network management personnel ([0067]; [0071]).
- 14. As per claim 12, Gilbert teaches the system of claim 2, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement

an internal personnel access mechanism configured to provide internal personnel with direct access to the network management mechanism ([0067]; [0071]; [0053]).

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- 15. As per claim 13, Gilbert teaches the system of claim 4, wherein the common interface mechanism is further configured to provide access to the end-user management mechanism for at least one of the multiple service providers and network management personnel ([0067]; [0071]; [0053]).
- 16. As per claim 14, Gilbert teaches the system of claim 4, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an internal personnel access mechanism configured to provide internal personnel with direct access to the end-user management mechanism ([0055]; [0067], wherein access made available upon proper authentication).
- 17. As per claim 15, Gilbert teaches the system of claim 1, wherein the common network comprises a network dedicated to broadband data transport services ([0073]).
- 18. As per claim 16, Gilbert teaches the system of claim 15, wherein the broadband data transport services comprise at least one of Internet access ([0073]), packetized voice, voice over IP, and video on demand.
- 19. As per claim 17, Gilbert teaches the system of claim 1, wherein the common network comprises an open access network ([0073], wherein Internet is a form of open access network).
- 20. As per claim 18, Gilbert teaches the system of claim 1, wherein at least a portion of the common network comprises an Internet protocol network ([0073]).
- 21. As per claim 20, Gilbert teaches the system of claim 1, wherein the at least one of the multiple service providers comprises an Internet service provider ([0073]).

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22. As per claim 25, Gilbert teaches the system of claim 1, wherein:

the digital repository is further populated with entries including network asset management information corresponding to assets of the common network ([0073]); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a network asset management mechanism configured to access and maintain entries in the digital repository regarding network asset management information ([0073]; [0070-0071]).

- 23. As per claim 26, Gilbert teaches the system of claim 25, wherein the common interface mechanism is further configured to provide access to the network asset management mechanism for network management personnel ([0071]; [0073]).
- 24. As per claim 27, Gilbert teaches the system of claim 25, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an internal personnel access mechanism configured to provide internal personnel with direct access to the network asset management mechanism ([0071]; [0073]).
- 25. As per claim 28, claim 28 is rejected for the same reasons as rejection to claim 5 above.
- 26. As per claim 33, Gilbert teaches the system of claim 1, wherein:

the digital repository is further populated with entries including workforce management information ([0053]; [0071]; [0073]); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a workforce management mechanism configured to access and maintain entries in the digital repository regarding workforce management information ([0053]; [0071]; [0073]).

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- 27. As per claim 34, Gilbert teaches The system of claim 33, wherein the common interface mechanism is further configured to provide access to the workforce management mechanism for at least one of the multiple service providers and network management personnel ([0053]; [0071]; [0073]).
- 28. As per claim 35, claim 35 is rejected for the same reasons as rejection to claim 27 above.
- As per claim 39, Gilbert teaches the system of claim 38, wherein the common interface mechanism is further configured to provide access to the <u>customer</u> billing mechanism for at least one of the multiple service providers and network management personnel ([0070-0071]; [0073])
- 30. As per claim 40, claim 40 is rejected for the same reasons as rejection to claim 27 above.
- As per claim 41, Gilbert teaches the system of claim 1, wherein the billing information includes at least one of an end-user identification indicator, a service level purchased indicator, an end-user service provider indicator, a usage amount indicator, a detailed billing amount, a cumulative billing amount, and a billing period indicator ([0065-0067]; [0073]).
- 32. As per claim 42, Gilbert teaches the system of claim 1, wherein:
 the digital repository is further populated with entries including general ledger and accounts payable

information corresponding to at least one of the multiple service providers ([0064]); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a general ledger and accounts payable mechanism configured to access and maintain entries in the digital repository regarding general ledger and accounts payable information ([0064]; [0073]).

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- 33. As per claim 43, Gilbert teaches the system of claim 42, wherein the common interface mechanism is further configured to provide access to the general ledger and accounts payable mechanism for network management personnel ([0067]; [0070-0073]; [0073]).
- 34. As per claim 44, Gilbert teaches the system of claim 42, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an internal personnel access mechanism configured to provide internal personnel with direct access to the general ledger and accounts payable mechanism ([0067]; [0070-0073]; [0073]).
- 35. As per claim 45, Gilbert teaches the system of claim 1, wherein at least a portion of the common network comprises a Data Over Cable Service Interface Specification network ([0073]).
- 36. As per claim 47, Gilbert teaches the system of claim 1, wherein the digital repository is implemented as a single instance of a database (Fig 6, item 300).
- 37. As per claim 49, Gilbert teaches the system of claim 1, wherein the common interface mechanism is further configured to be customizable by each of the multiple service providers ([0069]).
- 38. As per claim 50, Gilbert teaches the system of claim 49, wherein the common interface mechanism may be customized by at least one of using a sales script ([0069]) and adding a logo.
- As per claim 51, Gilbert teaches the system of claim 1, wherein the common interface mechanism is further configured such that each of the multiple service providers may restrict access based on at least one of a userid and a role ([0055], wherein verification must be done in order to gain access, improper verification will not result in access).
- 40. As per claim 52, claim 52 is rejected for the same reasons as rejection to claim 27 above.

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- 41. As per claim 53, claim 53 is rejected for the same reasons as rejection to claim 1 above.
- 42. As per claim 54, Gilbert teaches the computer program product of claim 53, further comprising:
- a <u>fourth</u> computer code device configured to maintain network management information in the database, wherein the first computer code device is further configured to provide network management personnel with access to the <u>fourth</u> computer code device to maintain entries of the database regarding network management information ([0070-0071]; [0073]).
- As per claim 55, Gilbert teaches the computer program product of claim 54, further comprising: a <u>fifth</u> computer code device configured to provide internal personnel with direct access to the <u>third</u> computer code device to maintain entries of the database regarding network management information ([0065-0066]; [0070-0071]; [0073]).
- As per claim 56, Gilbert teaches the computer program product of claim 53, wherein the first computer code device is further configured to provide secure access to entries in the database (Col. 8, lines 1-10).
- 47. As per claim 57, Gilbert teaches the computer program product of claim 53, further comprising:
- a <u>fourth</u> computer code device configured to maintain at least one of network usage information and end-user provisioning information in the database ([0073]), wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the <u>fourth</u> computer code device to maintain entries of the database regarding the at least one of network usage information and end-user provisioning information ([0070-0071]; [0073]).

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- 48. As per claim 58, claim 58 is rejected for the same reasons as rejection to claim 27 above.
- 49. As per claims 60-63, and 65, claims 60-63 and 65 are rejected for the same reasons as rejections to claims 15-18 and 20 above respectively.
- 50. As per claim 68, claim 68 is rejected for the same reasons as rejection to claim 25 above.
- 51. As per claim 69, claim 69 is rejected for the same reasons as rejection to claim 27 above.
- 52. As per claim 72, claim 72 is rejected for the same reasons as rejection to claim 33 above.
- 53. As per claim 73, claim 73 is rejected for the same reasons as rejection to claim 35 above.
- 54. As per claim 74, Gilbert teaches the computer program product of claim 53, wherein: the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the <u>third</u> computer code device to access entries of the database regarding billing information, and to provide network management personnel with access to the third computer code device to maintain entries of the database regarding billing information (item 300, Fig 6; [0073]).
- 55. As per claim 75, claim 75 is rejected for the same reasons as rejection to claim 40 above.
- 56. As per claim 76, claim 76 is rejected for the same reasons as rejection to claim 42 above.
- 57. As per claim 77, claim 77 is rejected for the same reasons as rejection to claim 43 above.
- 58. As per claim 78, claim 78 is rejected for the same reasons as rejection to claim 45 above.
- 59. As per claims 80-82, claims 80-82 are rejected for the same reasons as rejection to claims 49-51

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above respectively.

- 60. As per claim 83, claim 83 is rejected for the same reasons as rejection to claim 1 above.
- As per claim 84, Gilbert teaches the method of claim 83, further comprising the steps of: monitoring a status of the common network ([0073]);

storing network management information in the database corresponding to the status of the common network determined in the monitoring step ([0073]); and

accessing the network management information in the database via the single user interface by network management personnel ([0070-0071]).

As per claim 85, Gilbert teaches the method of claim 83, further comprising the steps of:
gathering first end-user provisioning information from the first end-user;
storing the first end-user provisioning information in the database ([0073]);
associating the first end-user provisioning information with the first end-user in the database;
gathering second end-user provisioning information from the second end-user;
storing the second end-user provisioning information in the database;
associating the second end-user provisioning information with the second end-user in the database;
([0073]).

monitoring a usage of the common network by the first end-user ([0073]);

storing first end-user network usage information in the database corresponding to the usage of the common network by the first end-user ([0073]);

associating the first end-user network usage information with the first end-user in the database; monitoring a usage of the common network by the second end-user;

storing second end-user network usage information in the database corresponding to the usage of the

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common network by the second end-user; and

associating the second end-user network usage information with the second end-user in the database ([0011]; [0014-0015]), in order to generate a billing statement for the users based upon the user's usage information.

- 63. As per claims 86, 88-93 and 95, claim 86-93, and 95 is rejected for the same reasons as rejection to claims 6, 8-9, 15-18, and 45 above.
- 64. As per claim 97, claim 97 is rejected for the same reasons as rejection to claim 20 above.
- 65. As per claim 99, claim 99 is rejected for the same reasons as rejection to claim 25, 27 above.
- As per claims 102, 104, claims 102, 104 are rejected for the same reasons as rejections to claims 33 and 35 above respectively.
- 67. As per claim 105, claim 105 is rejected for the same reasons as rejection to claim 42, 43 above.
- 68. As per claim 106, claim 106 is rejected for the same reasons as rejections to claim 1 above.
- 69. As per claim 107, Gilbert teaches the system of claim 1 wherein:

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement

a data logging mechanism configured to maintain a log of entries regarding end-user identification information ([0070-0071]; [0073]; item 300, Fig 6).

As per claim 108, Gilbert teaches the system of claim 107, wherein the end-user identification information includes at least one of an end-user device MAC address, a DHCP IP address granted to an end-user device, and end-user service account information ([0073]; [0051]).

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- 71. As per claim 109, claim 109 is rejected for the same reasons as rejections to claim 23 above.
- As per claim 110, Gilbert teaches the system of claim 109, wherein the common interface mechanism is further configured to provide a single user interface for the first service provider and the second service provider to access the log of entries maintained by the data logging mechanism, the first service provider having access to entries regarding end-users of the first service provider and the second service provider having access to entries regarding end-users of the second service provider ([0070-0071]; [0073]).
- 73. As per claim 111, claim 111 is rejected for the same reasons as rejections to claim 9 above.
- 74. As per claim 112, claim 112 is rejected for the same reasons as rejections to combination of claims 1 and 24 above.
- 75. As per claim 113, Gilbert teaches the computer program product of claim 53, further comprising:
- a <u>fourth</u> computer code device configured to maintain a log of entries regarding end-user identification information ([0051]; [0073]).
- 76. As per claim 114, claim 114 is rejected for the same reasons as rejection to claim 108 above.
- 77. As per claim 115, claim 115 is rejected for the same reasons as rejections to combination of claims 1 and 24 above.
- 78. As per claim 116, Gilbert teaches the computer program product of claim 53 wherein at least a portion of the computer program code mechanism is configured to be invoked through an application program interface ([0068]).

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79. As per claim 117, Gilbert teaches the computer program product of claim 53, further comprising: a <u>fourth</u> computer code device configured to perform at least one of data warehousing and data mining of information in the database ([0073]).

Claim Rejections - 35 USC § 103

- 80. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 81. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert, US 2002/0069163, in view of "SSH Secure Shell", BaBar Homepage (hereinafter BaBar), 1999.
- As per claim 7, Gilbert does not explicitly teach the system of claim 6, wherein the common interface mechanism provides secure access by at least one of accepting traffic from a predetermined set of IP addresses, encryption using secure shell, encryption using secure hypertext transfer protocol, user authentication by username and password, and user authentication by a one-time password technology BaBar teaches encryption using secure shell technology in order to keep information that client send over the network from being seen by others (pg 1, 2nd paragraph).

It would have been obvious to combine teachings of Gilbert and BaBar in order to keep information that client send over the network from being seen by others.

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Claims 19, 46, 64, 94 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert, US 2002/0069163, further in view of Sistanizadeh et al. (hereinafter Sistanizadeh), US 6,101,182, further in view of 'Official Notice'.

84. As per claim 19, Gilbert does not teach hybrid fiber optic and coaxial network.

Sistanizdeh teaches hybrid fiber optic and coaxial network, Col. 3, lines 15-40 for improvement of speed.

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Gilbert and Sistanizdeh in order to improve speed and provide a greater range of transportation.

- As per claim 46, Vasell does not teach the system of claim 1, wherein at least a portion of the common network comprises a European Data Over Cable Service Interface Specification. However, "Official Notice" is taken that the concept and advantages of providing for a European Data Over Cable Service Interface Specification network transportation purposes in another country is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include European Data Over Cable Service Interface Specification network because it would provide for other modes of operation in other countries/territories.
- 86. As per claim 64, claim 64 is rejected for the same reasons as rejection to claim 19 above.
- 87. As per claim 94, claim 94 is rejected for the same reasons as rejection to claim 19 above.
- 88. As per claim 96, claim 96 is rejected for the same reasons as rejection to claim 46 above.

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Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert, US 2002/0069163, further in view of "Database Replication", Frame Technology (hereinafter Frame), 1993.

90. As per claim 48, Gilbert teaches the digital repository (Fig 6, item 300)

however, Gilbert does not explicitly teach implemented as at least two instances of a database, at least one of the at least two instances of the database serving as a master database.

Frame teaches implementation as at least two instances of a database, at least one of the at least two instances of the database serving as a master database (see for example, pg 2, picture).

In order to have high availability and improved redundancy (see for example, pg 1, 'Advantages').

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Gilbert and Frame in order to have high availability and improved redundancy for the stored data.

- 91. Claims 29-32, 70-71, 100-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over over Gilbert, US 2002/0069163, in view of Cogger et al. (hereinafter Cogger), US 2002/0087383.
- 92. As per claim 29, Gilbert teaches digital repository (item 300, Fig 6)

However, Gilbert does not explicitly teach the digital repository is further populated with entries including trouble ticket status information; and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a trouble ticketing mechanism configured to access and maintain entries in the digital repository regarding trouble ticket information.

Cogger teaches:

the digital repository is further populated with entries including trouble ticket status information (pg 2, [0018]); and

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the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a trouble ticketing mechanism configured to access and maintain entries in the digital repository regarding trouble ticket information (pg 2, [0018]; pg 1, [0015]).

In order to allow users to remotely access a service provider's trouble ticketing system.

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Gilbert and Cogger would improve the accessibility and functionality for Gilbert's system by allowing users/ISPs to enter and keeping track of trouble tickets remotely.

93. As per claim 30, Gilbert teaches common interface mechanism ([0068])

however, Gilbert does not teach mechanism is further configured to provide access to the trouble ticketing mechanism for at least one of the multiple service providers and network management personnel.

Cogger teaches the system of claim 29, wherein the common interface mechanism is further configured to provide access to the trouble ticketing mechanism for at least one of the multiple service providers and network management personnel (pg 2, [0018], [0022], [0023]).

In order to allow users to remotely access a service provider's trouble ticketing system.

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Gilbert and Cogger would improve the accessibility for Gilbert's system by allowing users/ISPs to enter and keeping track of trouble tickets remotely.

- 94. As per claim 31, claim 31 is rejected for the same reasons as rejection to claim 27 above.
- 95. As per claim 32, Gilbert does not explicitly teach the system of claim 29, wherein the trouble ticket status information includes at least one of a trouble ticket status indicator, a problem indicator, an impacted end-user indicator, and a service provider indicator.

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Cogger teaches

wherein the trouble ticket status information includes at least one of a trouble ticket status indicator, a problem indicator, an impacted end-user indicator, and a service provider indicator ([0091]), in order to allow users to keep track of the trouble tickets ([0017]).

It would have been obvious to combine teachings of Gilbert and Cogger in order to keep track of the trouble tickets.

96. As per claim 70, Gilbert does not teach the computer program product of claim 53, further comprising:

a second computer code device configured to maintain trouble ticket status information in the database, wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to maintain entries of the database regarding trouble ticket status information.

Cogger teaches:

a second computer code device configured to maintain trouble ticket status information in the database, wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to maintain entries of the database regarding trouble ticket status information (pg 2, [0018]-[0019], [0015]).

In order to allow users to remotely access a service provider's trouble ticketing system.

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Gilbert and Cogger would improve the accessibility for Gilbert's system by allowing users/ISPs to enter and keeping track of trouble tickets remotely.

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97. As per claim 71, Gilbert does not teach the computer program product of claim 70, further comprising:

a third computer code device configured to provide internal personnel with direct access to the second computer code device to maintain entries of the database regarding trouble ticket status information.

Cogger teaches:

a third computer code device configured to provide internal personnel with direct access to the second computer code device to maintain entries of the database regarding trouble ticket status information (pg 2, [0022], [0023], [0018]).

In order to allow users to remotely access a service provider's trouble ticketing system.

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Gilbert and Cogger would improve the accessibility for Gilbert's system by allowing users/ISPs to enter and keeping track of trouble tickets remotely.

98. As per claim 100, Gilbert does not teach the method of claim 83, further comprising the steps of:

opening a first trouble ticket by the first service provider via the single user interface; storing a first trouble ticket entry in the database corresponding to the first trouble ticket; associating the first trouble ticked entry with the first service provider in the database; opening a second trouble ticket by the second service provider via the single user interface; storing a second trouble ticket entry in the database corresponding to the second trouble ticket; associating the second trouble ticket entry with the second service provider in the database;

querying the database for at least one of the first trouble ticket entry and the second trouble ticket entry by network management personnel; updating a status of the at least one of the first trouble ticket entry and the second trouble ticket entry by network personnel; and

storing the at least one of the first trouble ticket entry and the second trouble ticket entry in the

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database with the status as updated in the updating step.

Cogger teaches

opening a first trouble ticket by the first service provider via the single user interface; storing a first trouble ticket entry in the database corresponding to the first trouble ticket; associating the first trouble ticked entry with the first service provider in the database; opening a second trouble ticket by the second service provider via the single user interface; storing a second trouble ticket entry in the database corresponding to the second trouble ticket; associating the second trouble ticket entry with the second service provider in the database; querying the database for at least one of the first trouble ticket entry and the second trouble ticket entry by network management personnel; updating a status of the at least one of the first trouble ticket entry and the second trouble ticket entry by network personnel; and

storing the at least one of the first trouble ticket entry and the second trouble ticket entry in the database with the status as updated in the updating step (pg 2, [0018]-[0020], [0022]-[0023]).

In order to allow users to remotely access a service provider's trouble ticketing system.

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Gilbert and Cogger would improve the accessibility for Gilbert's system by allowing users/ISPs to enter and keeping track of trouble tickets remotely.

99. As per claim 101, Gilbert does not teach the method of claim 100, further comprising the step of:

associating at least one of the first trouble ticket and the second trouble ticket with an end-user in the database indicating a particular end-user having a problem.

Cogger teaches:

associating at least one of the first trouble ticket and the second trouble ticket with an end-user in the

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database indicating a particular end-user having a problem (pg 2, [0018]).

In order to allow users to remotely access a service provider's trouble ticketing system.

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Gilbert and Cogger would improve the accessibility for Gilbert's system by allowing users/ISPs to enter and keeping track of trouble tickets remotely.

100. Claim 21-24, 66-67, 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert, US 2002/0069163, in view of Woods et al. (hereinafter Woods), US 2003/0140172.

101. As per claim 21, Gilbert teaches the system of claim 1 wherein:

the digital repository is further populated with entries including service information ([0073]); and the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a service availability mechanism configured to access and maintain entries in the digital repository regarding information ([0073]).

However, Gilbert does not explicitly teach

service availability information

Woods teaches

service availability information ([0011-0013]; [0034], wherein the service is available on a limited bases and the master scheduler is responsible to schedule the service availability information with the appropriate requesting user), in order to provide services to geographically dispersed users ([0004]).

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102. As per claim 22, Gilbert does not explicitly teach the system of claim 21, wherein the service availability information includes information regarding geographic availability of the common network Woods teaches

wherein the service availability information includes information regarding geographic availability of the common network (see for example, Fig 14, item 1404; Table 33, item 1404), in order to provide for proper redundancy in a geographically constrained network ([0004]).

- 103. As per claim 23, Gilbert teaches the system of claim 21, wherein the common interface mechanism is further configured to provide access to the service availability mechanism for at least one of the multiple service providers and network management personnel ([0071]; [0073]).
- 104. As per claim 24, Gilbert teaches the system of claim 21, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an internal personnel access mechanism configured to provide internal personnel with direct access to the mechanism ([0071]; [0073]).

However, Gilbert does not teach service availability mechanism, this is addressed in claim 21 above.

- 105. As per claim 66, claim 66 is rejected for the same reasons as rejection to claim 25 and 26 above
- 106. As per claim 67, claim 67 is rejected for the same reasons as rejection to claim 25 and 26 above
- 107. As per claim 98, Gilbert does not explicitly teaches the method of claim 83, further comprising the steps of:

gathering service availability information corresponding to a geographic availability of the common network;

storing the service availability information in the database;

requesting connectivity to the common network by a third end-user to one of the first service provider

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and the second service provider;

querying the service availability information in the database via the single user interface by the one of the first service provider and the second service provider to determine an availability for the third enduser; and

indicating to the third end-user that the common network is one of available and not available based on a result of the querying step.

Woods teaches

gathering service availability information corresponding to a geographic availability of the common network ([0011-0013]; [0034], wherein the service is available on a limited bases and the master scheduler is responsible to schedule the service availability information with the appropriate requesting user);

storing the service availability information in the database;

requesting connectivity to the common network by a third end-user to one of the first service provider and the second service provider ([0034]);

querying the service availability information in the database via the single user interface by the one of the first service provider and the second service provider to determine an availability for the third enduser ([0034]; [0070]); and

indicating to the third end-user that the common network is one of available and not available based on a result of the querying step ([0034]).

108. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert, US 2002/0069163, in view of "Registration and Accommodation", Hotel, 1999.

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109. As per claim 36, Gilbert does not explicitly teach the system of claim 33, wherein the workforce management information includes at least one of a workorder description indicator, a workorder status indicator, an assigned truck indicator, a confirmation number indicator, and an appointment time indicator.

Hotel teaches of a confirmation number (pg 3, lines 1-6) in order to identify and document the confirmation of a booking (pg 3, 1-6).

It would have been obvious to combine the teachings of Gilbert and Hotel in order to identify and document the confirmation of a booking.

Conclusion

Applicant's arguments with respect to claim 1-36, 39-58, 60-102, 104-117 have been considered but are moot in view of the new ground(s) of rejection.

"hybrid fiber co-axial network for transportation purposes," "providing a European Data Over Cable Service Interface Specification network sic, for transportation purposes" are all intended use thus they will not give any patentable weight.

THIS ACTION IS MADE FINAL. Applicant is reined of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "System method and computer program product for supporting multiple service providers with a trouble ticket capability".

1.	US 6101182	Sistanizadeh et al.
ii.	US 6636502	Lager et al.
iii.	US 6662233	Skarpness et al.
iv.	US 6496575	Vasell et al.
v	US 6430175	Ienninos et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BURGESS, GLENTON B can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100